

Notice of Allowability	Application No.	Applicant(s)	
	10/085,690	WILSON ET AL.	
	Examiner	Art Unit	
	Mike Stahl	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 11/17/03.
2. ☒ The allowed claim(s) is/are 1-21.
3. ☒ The drawings filed on 27 February 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other _____ |

This office action is in response to the amendment filed November 17, 2003. The changes to the specification and claims have been entered. Claims 1-21 are pending. It is noted that the examiner inadvertently listed claims 19-21 on line 8 of the Office Action Summary accompanying the last office action. These claims should have been listed instead on line 5 as being allowed. As applicant noted in the remarks, the body of the office action indicates correctly that claims 19-21 are allowed.

Examiner's Amendment

As presently written, claim 2 depends from claim 3. MPEP 608.01(n)(IV) states that a dependent claim may refer back to any preceding independent claim. Accordingly the examiner has renumbered independent claim 3 as claim 2, and dependent claim 2 as claim 3. Claim 4 has been amended to depend from independent claim 2 (as renumbered) and 7 has been revised to depend from dependent claim 3 (as renumbered). If applicant disagrees with these changes, traversal may be in response to this action.

Allowable Subject Matter

Claims 1-21 are allowed. Claims 19-21 remain allowed for the reasons set forth in the last office action.

Claims 3 and 13 are presently allowed since applicant has rewritten them in independent form incorporating the previously indicated allowable subject matter of originally filed claims 3

and 13 (respectively). Claims 2, 4, and 7-10 are allowable by dependence from claim 3, and claim 14 is allowable by dependence from claim 13.

Applicant has amended independent claims 1 and 11 to further recite that the at least one wavelength of light extracted from the first waveguide is a function of a position of the tuning member relative to the resonant cavity. The previously applied Villeneuve et al. reference does not teach or suggest this feature. As pointed out in the last office action, and reiterated in applicant's remarks, Villeneuve teaches that the disclosed photonic crystal drop filter may be tuned by controlling the dielectric constant of parts of the device. However, there is no specific disclosure of controlling the resonant wavelength of the cavity by controlling the position of a tuning member relative to the cavity. The figure 3 device is representative. In the examiner's view, the resonant wavelengths of the cavities are determined by characteristics of the central defects **308/310** which define the cavities. Villeneuve discloses the possibility of tuning other lattice points **314-320**, but it appears that this is done to control the coupling between the cavities and the waveguides (or between the cavities themselves in other embodiments). It appears that the position of the lattice points **314-320** relative to the cavities would influence the degree of coupling but not the actual resonant wavelengths of the cavities themselves. Accordingly, claims 1 and 11 are deemed to be patentably distinct from the Villeneuve reference. Claims 5-6, 12, and 15-18 are allowable by dependence from claims 1 or 11 respectively.

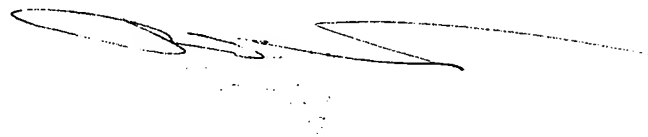
Conclusion

Any inquiry concerning this communication should be directed to Mike Stahl at (703) 305-1520 prior to January 12, 2004 or (571) 272-2360 after that date. Official communications which are eligible for submission by facsimile and which pertain to this application may be faxed to (703) 872-9306. Inquiries of a general or clerical nature (e.g., a request for a missing form or paper, etc.) should be directed to the Technology Center 2800 receptionist at (703) 308-0956 or to the technical support staff supervisor at (703) 308-3072.

MJS

Michael J. Stahl
Patent Examiner
Art Unit 2874

December 12, 2003

A handwritten signature in black ink, appearing to be "MJS", located at the bottom right of the page.